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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,498	11/21/2003	Masamitsu Yamaguchi	95704	7600
20736	7590	08/18/2005		
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307				
			EXAMINER CONNELLY CUSHWA, MICHELLE R	
			ART UNIT 2874	PAPER NUMBER

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,498

Applicant(s)

YAMAGUCHI ET AL.

Examiner

Michelle R. Connelly-Cushwa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

Four (4) sheets formal drawings were filed on November 21, 2003 and have been accepted by the Examiner.

Specification

A substitute specification including the claims is required pursuant to 37 CFR 1.125(a) because the entire specification, including the claims, is generally narrative and indefinite, failing to conform with current U.S. practice. It appears to be a literal translation into English from a foreign document and is replete with grammatical and idiomatic errors. For example, after reviewing the foreign document, it appears that:

"(n.2)" on page 3, line 10 of the specification should be -- $(n \geq 2)$ --;

".i" on page 3, line 13 of the specification should be -- λ_i --;

"m.2" on page 3, line 13 of the specification should be -- $m \geq 2$ --

".i" on page 4, line 1 of the specification should be -- λ_i --;

".(i)" on page 4, line 2 of the specification should be -- $\alpha(\lambda_i)$ --;

"K" on page 4, line 4, should be lower case -- k--;

" $A_j(.i)$ " on page 4, line 6 of the specification should be -- $A_j(\lambda_i)$ --.

Furthermore, the specification, including the claims, is difficult to understand. For example, the following sentences are not clear:

"As a result, the refractive index distribution of the core and the cladding makes the wavelength dependence characteristic receive great influence." (see page 10, lines 22-24); and

"Therefore, there is such an effect that it is possible to use the optical fiber wherein the concentration distribution of the dopant is not uniform by seeing along the radius direction of the optical fiber." (see page 11, lines 10-12)

These are a few examples. The specification, including the claims, should be carefully reviewed and amended for grammatical correctness and clearness. Applicant is requested to carefully review each equation presented in the specification and claims to ensure that the proper variables are used, wherein the same variables are used in the foreign application for which priority has been claimed, and to ensure that a correct definition is provided for each variable.

A substitute specification must not contain new matter. The substitute specification must be submitted with markings showing all the changes relative to the immediate prior version of the specification of record. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. An accompanying clean version (without markings) and a statement that the substitute specification

contains no new matter must also be supplied. Numbering the paragraphs of the specification of record is not considered a change that must be shown.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-23; the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Regarding claims 3 and 10; the claims contain the limitation "doped area (cladding)" in line 2 of each claim. This limitation is unclear because it is impossible to tell whether or not limitations within () are required, therefore it is impossible to determine the scope of the claim.

Regarding claims 9 and 23; the claims are unclear because they appear to indicate that the dopant enables the absorption of the optical signal to both increase and decrease as the wavelength becomes longer.

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Regarding claims 2-23; the claims inherently contain the deficiencies of any base or intervening claims from which they depend.

Claims 3, 9-18 and 23 are too indefinite and have not been further considered with respect to prior art.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-8 and 19-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe et al. (US 6,748,151 B1).

Regarding claim 1; Watanabe et al. discloses an optical fiber (see Figure 1) for attenuating an optical signal, the optical fiber comprising:

- a core (6);
- a cladding (8);
- two or more kinds of dopants added for attenuating an optical signal (see column 5, lines 18-21); and
- wherein the attenuation is given by the summation of the concentration of the dopant and the attenuation of the optical fiber with respect to

wavelength and length of the optical fiber (see Expression 1 in column 6).

Regarding claim 2; the dopants comprise at least two kinds of transition metals (see column 5, lines 18-24).

Regarding claims 4, 5, 19, 20; the wavelengths of the optical signals are in the range of 1200-1700 nm and include the wavelengths of 1310 nm and 1550 nm (see the Figures; column 2, line 58; and column 7, line 11).

Regarding claims 6, 7, 21; the fiber is single mode (see column 2, lines 21-22).

Regarding claims 8 and 22; the doped area is not uniform along the radius direction of the optical fiber (see column 3, lines 45-49).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Han et al. (US 6,757,473 B2) ; Chenard et al. (US 6,498,888 B1) ; DiGiovanni et al. (US 5,572,618) ; Chia (US 5,633,974) ; and Takeuchi et al. (US 5,841,926) each disclose optical fibers for attenuating optical signals.

Any inquiry concerning the merits of this communication should be directed to Examiner Michelle R. Connelly-Cushwa at telephone number (571) 272-2345. The examiner can normally be reached 9:00 AM to 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B. Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general or clerical nature should be directed to the Technology
Center 2800 receptionist at telephone number (571) 272-1562.

Michelle R. Connelly-Cushwa

Michelle R. Connelly-Cushwa

Patent Examiner

August 15, 2005